

Anadromous Salmonid Protection Rules, 2012

Title 14 of the California Code of Regulations (14 CCR):

Amend:

§ 916.9 [936.9, 956.9] Protection and Restoration in Watersheds with Threatened or Impaired Values.

Amend 14 CCR § 916.9 [936.9, 956.9] (c)(4):

(3) ***** an additional sediment filter on steeper slopes with high or moderate erosion hazard rating when tractor operations are proposed.

(4) **Class II large watercourses (Class II-L):** The primary objective is to maintain, protect or restore the values and functions of Class II-L type watercourses described below. Class II-L type watercourses: (i) can supply significant influx of water and nutrients to a Class I watercourse during the month of July during a year of average precipitation and runoff as derived from long-term average precipitation data sets available from CAL FIRE, U.S. Geological Survey, or National Oceanic and Atmospheric Administration (NOAA), (ii) can supply coarse and fine sediment to the Class I channel, and (iii) may be able to supply wood of a size that would function as large wood for the Class I watercourse. Recruitment, delivery and retention of large wood in Class II- L type watercourses is also critical, as large wood increases sediment, nutrient, and water storage and decreases the rate of sediment transport to fish-bearing Class I watercourses. Other objectives stated in 14 CCR § 916.9 [936.9, 956.9] subsections (c)(1) and (2) above for the Core Zone and Inner Zone are also desired objectives for Class II-L type watercourses.

(5) A primary objective for all WLPZs is to implement practices to maintain****

1 **Amend 14 CCR § 916.9 [936.9, 956.9] (g)**

2 **(f) Class I watercourses** – *****which delimb harvested trees on pathway over which heavy
3 equipment would travel.

4 **(g) Class II watercourses –**

5 The following are the minimum requirements for Class II WLPZ delineation and timber
6 operations. Differing rules are specified for watersheds in the coastal anadromy zone, the
7 Southern Subdistrict of the Coast Forest District, and areas outside the coastal anadromy zone.
8 WLPZ width ranges from 50 to 100 feet slope distance, depending on side slope steepness in
9 the WLPZ and the watercourse type.

10 **(1) Determine the Class II Watercourse Type:** Class II watercourses are
11 composed of two types - Class II-S (standard) watercourses and Class II-L (large)
12 watercourses. A Class II-L watercourse is defined as a Class II watercourse that: (i) can supply
13 ~~significant influx of~~ water and nutrients to a Class I watercourse during the month of July during
14 an average hydrologic year; (ii) can supply coarse and fine sediment to the Class I channel; and
15 (iii) may be able to supply wood of a size that would function as large wood for the Class I
16 watercourse. ~~Initial scoping for the i~~Identification of potential Class II-L watercourse types shall
17 be based on one or more of the office methods specified under 14 CCR § 916.9 [936.9, 956.9]
18 subsection (g)(1)(A). Final determination of identified potential Class II-L watercourse types
19 shall be made and verified in the field by direct observation methods as specified under 14
20 CCR § 916.9 [936.9, 956.9], subsection (g)(1)(B). Class II-S watercourses are those classified
21 as Class II watercourses pursuant to 14 CCR § 916.5 [936.5, 956.5], but do not meet the
22 definition of a Class II-L watercourse.

23 **(A)** Office-based ~~approaches methods shall be used~~ to identify potential Class II-L
24 watercourses:

25 **1. Stream order:** After classifying the watercourses in an area

pursuant to 14 CCR § 916.5 [936.5, 956.5], map all Class II watercourses in the area of consideration on current 1:24,000 scale U.S. Geological Survey topographic maps and determine stream order following the stream order method in 14 CCR § 895.1. Second order and third order Class II watercourses are potentially Class II-L watercourses.

2. “Blue Line” streams: Watercourses mapped with a blue or black line on current 1:24,000 scale U.S. Geological Survey topographic maps that are not Class I are inferred to be Class II-L watercourses.

3. Drainage area: A calculated drainage area for an ownership or comparable local region area, known to produce Class II watercourses with Class II-L type characteristics, including but not limited to mid to late summer flow, can be used to indicate potential Class II-L watercourses. The established minimum drainage area used in this approach shall be based on continuous streamflow monitoring data, past plan experience, and/or local knowledge, ~~for an ownership or local region and extrapolated over the ownership or local area can indicate potential Class II-L watercourses.~~

(B) ~~Field-based approaches methods to identify potential Class II-L watercourses:~~ ~~Determination-Designation~~ of ~~potential~~ Class II-L watercourse types shall be ~~verified-determined~~ in the field by direct ~~channel~~ observations of channel morphology including width and depth at bankfull stage, gradient, channel substrate, and flow regime, supplemented with and local experience or site-specific documentation. Class II-L watercourses have the following observable characteristics: using more than one or more of the following approaches.

1. Indication of sSignificant flow contribution to a Class I watercourse, at least through approximately July 15th, following a year with at least average precipitation. Surface flow need not be entirely spatially continuous, however surface flow must be present for greater than 5075 percent of the channel length within 200 feet of the receiving Class I watercourse. The presence of springs or seeps, and aquatic animal and plant life that

1 require perennial or near perennial flow may indicate a significant flow regime contribution. Low
2 surface flow volume in a Class II watercourse may be documented by an RPF with photographs
3 and other appropriate documentation depicting the Class II watercourse flow regime.
4

5 2. Channel substrate that includes coarse sediment, and
6 evidence of a flow regime capable of transporting coarse sediment (coarse gravel and small
7 cobbles 0.6 to 5.0 —5-inches in diameter or greater) to a Class I watercourse during peak
8 flows. The presence and distribution of coarse sediment in the channel within 200 feet of the
9 receiving Class I watercourse may indicate evidence of a Class II flow regime capable of
10 transporting coarse and fine sediment; however underlying sedimentary geologic formations
11 may constrain particle size in some regions of the state. Class II-L flow regime, such as
12 channel width at bankfull stage, channel depth at bankfull stage, channel slope, mean
13 entrenchment ratio, the presence of springs or seeps, and the presence of aquatic animal and
14 plant life that require mid-summer flow.

15 3. Sufficient channel width and depth at bankfull stage to allow for
16 transport of large wood, defined as >12 inches in diameter and six feet in length, to receiving
17 Class I waters, during peak flows. An average minimum bankfull width and depth of six feet by
18 one foot, as measured within 200 feet of the receiving Class I watercourse, can be used to
19 determine large wood transport capacity. Determination of average bankful width and depth
20 shall be based on a minimum of three channel dimension measurements distributed evenly
21 throughout the 200 foot reach. The bankfull depth measurement at each location shall be taken
22 from the stream channel thalweg (deepest point of the stream channel).

23
24 3. Use of continuous streamflow monitoring data from headwater
25 watercourses to determine the watershed drainage area necessary to initiate mid-summer

1 surface streamflow for a given ecoregion area that allows reasonable extrapolation of and
2 extrapolate this data to the watercourses within the plan area to other headwater basins in that
3 ecoregion.

4 4. Use of a detailed analysis demonstrating that the water
5 temperature in the Class I watercourse will not be significantly impacted by harvesting in the
6 tributary watercourse's WLPZ, recognizing that supplying cool water is only one of the functions
7 of a Class II-L watercourse.

8 5. Determination of substantial subsurface flow as supported by:
9 (1) observation of surface flow in upstream channels above sediment deltas that have built up in
10 the Class II watercourse channel located near the confluence of a Class I watercourse; (2)
11 observation of flow in subsurface pipe shafts; (3) audible evidence of subsurface flow located
12 below organic and inorganic debris burying a watercourse channel; (4) use of dye/tracer
13 studies; and (5) determination of the temperature distribution within the Class I receiving
14 watercourse.

15 **(C)** Based on (A) and (B) above, make a determination if the portion of the Class II
16 watercourse being evaluated meets the definition of a Class II-L watercourse in 14 CCR § 916.9
17 [936.9, 956.9], subsection (c)(4).

18 **(D)** Include documentation in the plan explaining how the Class II-L determination(s)
19 were made within the plan area. Photographs, detailed analysis of potential stream temperature
20 effects on receiving Class I waters, and/or other documentation depicting Class II flow regime
21 and/or channel characteristics may be submitted by the RPF to support determination.

22 **(E)** All Class II-L watercourses designated above shall incorporate requirements stated
23 in 14 CCR § 916.9 [936.9, 956.9], (g)(2) for a maximum distance of 1000 feet, or total length of
24 Class II-L, which ever is less, measured from the confluence with a Class I watercourse.

(2) Class II WLPZ widths and operational requirements: All Class II WLPZs shall be
composed*****

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